WATER POLLUTION CONTROL PROGRAM

Missouri General Water Quality Certification Conditions for NWP 27 (Stream and Wetland Restoration Activities)

Pursuant to Section 401 of the Clean Water Act of 1972 the following best management practices are included as conditions in the Section 404 U.S. Army Corps of Engineers' Nationwide Permit (NWP). These conditions ensure that stream and wetland restoration activities do not violate the Water Quality Standards of the State of Missouri resulting in permanent damage to habitat, increased turbidity, reduced bank and channel stability, and impacts to the biological and chemical integrity of the waterbody. Jurisdictional definitions for this activity are explained in the NWP.

Any land disturbance activities disturbing one or more acres of total area for the entire project requires a storm water permit from the Water Pollution Control Program for land disturbance activities. Note that this is one acre of area disturbed for the total project, not one acre of waters of the United States. For questions, please contact the Water Pollution Control Program's Permit Section at (573) 751-6825.

Petroleum products spilled into any waterbody or on the banks where the material may enter waters of the state shall be immediately cleaned up and disposed of properly. Any such spills of petroleum shall be reported as soon as possible to the Missouri Department of Natural Resources' 24-hour Environmental Emergency Response number at (573) 634-2436.

Pursuant to Chapter 644.038, RSMo, the department certifies this nationwide permit without conditions for the construction of highways and bridges approved by the Missouri Highway and Transportation Commission, as it applies to impacts in all waters of the state.

- 1. This certification does not allow the filling of a jurisdictional spring or a spring with connectivity to a jurisdictional stream.
- 2. Care shall be taken to keep machinery out of the waterway as much as possible. Fuel, oil and other petroleum products, equipment and any solid waste shall not be stored below the ordinary high water mark at any time or in the adjacent floodway beyond normal working hours. All precautions shall be taken to avoid the release of wastes or fuel to streams and other adjacent waterbodies as a result of this operation.
- 3. Clearing of vegetation/trees shall be the minimum necessary to accomplish the activity.
- 4. The riparian area, banks, etc., shall be restored to a stable condition to protect water quality as soon as possible. Seeding/planting of native vegetation, mulching and needed fertilization shall be within three days of final contouring, or as soon as possible as seasonal timing permits. On-site inspections of these areas shall be conducted by the permittee as necessary to ensure successful revegetation and stabilization, and to ensure that erosion and deposition of soil in waters of the state is not occurring from this project.
- 5. Only clean, nonpolluting fill shall be used.

NWP 27 (Stream and Wetland Restoration Activities)

- 6. Work shall be conducted during low flow whenever possible.
- 7. The following materials are not suitable for bank stabilization and should not be used due to their potential to cause violations of the general criteria of the Water Quality Standards, 10CSR 20-7.031 (3) (A) (H):
 - a. Earthen fill, gravel, broken concrete where the majority of material is less than 12 inches in diameter, and fragmented asphalt, since these materials are usually not substantial enough to withstand erosive flows;
 - b. Concrete with exposed rebar;
 - c. Tires, vehicles or vehicle bodies, construction or demolition debris are solid waste and are excluded from placement in the waters of the state; and
 - d. Liquid concrete, including grouted riprap, if not placed as part of an engineered structure.

Recycled concrete may be used provided that it is clean material broken into appropriately sized pieces (greater than 12 inches) of riprap with no protruding rebar.

8. Instream culverts shall be sized and placed to maintain a depth of water at least as deep as the channel directly upstream of the crossing. Structures creating water velocities in excess two feet per second during average annual discharge shall be avoided. If preconstruction velocities exceed two feet per second, then structures shall not increase existing velocities. There shall be no drop between the downstream end of the culverts and the downstream water surface elevation.